What is claimed is:

1. A method of post-processing a decompressed image comprising the steps of:

    (a) establishing a filtering axis aligned relatively parallel to an

5   image edge in a block of image pixels; and

    (b) selectively filtering a plurality of pixels arrayed substantially parallel to said filtering axis.

2. The method of claim 1 wherein the step of establishing said filtering axis

10   comprises the steps of:

    (a) identifying a first pixel and a second pixel located on a projection parallel to a candidate axis; said first pixel located in a vicinity of a first boundary of said block and said second pixel located in a vicinity of a second boundary;

15   (b) comparing said first and said second pixel;

    (c) repeating steps (a) and (b) for a plurality of said candidate axes; and

    (d) designating as said filtering axis said candidate axis associated with a comparison of said first and said second

20   pixel having a predefined relationship to corresponding comparisons for other said candidate axes.

3. The method of claim 2 wherein said relationship between said comparison is a minimum of a mean of a difference between a plurality of said first and said

25   second pixels identified in connection with a candidate axis.

4. The method of claim 1 wherein the step of selectively filtering a plurality of pixels arrayed substantially parallel to said filtering axis comprises the steps of:

30   (a) designating a segment of contiguous pixels to be subject to

filtering if a comparison of a pair of pixels of said segment immediately adjacent to a boundary of said block satisfies a predetermined relationship; and

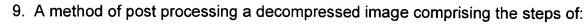(b) selectively filtering said pixels of said segment.

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5. The method of claim 4 wherein said predetermined relationship comparing said pair of pixels adjacent to said boundary comprises a upper boundary threshold for a difference between said pair of pixels.

10   6. The method of claim 4 wherein said predetermined relationship for comparing said pair of pixels adjacent to said boundary comprises a lower threshold for a difference between said pair of pixels.

7. The method of claim 6 wherein said lower threshold comprises a function of a
15   quantization parameter applicable to said block.

8. The method of claim 1 wherein the step of selectively filtering a plurality of pixels arrayed substantially parallel to said filtering axis comprises the steps of:

20   (a) designating a segment of contiguous pixels to be subject to filtering if a comparison of a pair of pixels of said segment immediately adjacent to a boundary of said block satisfies a predetermined relationship;

            (b) identifying at least one pixel on each side of said boundary as
25   a filtering range by successively comparing contiguous pairs of pixels further removed from said boundary to a continuity threshold; and

            (c) filtering said pixels of said filtering range.

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9. A method of post processing a decompressed image comprising the steps of:

    (a) selecting a block of image pixels for filtering as a function of a quantization parameter and a quantization parameter threshold;

    (b) establishing a filtering axis relatively parallel to an image edge in said block;

    (c) identifying a filtering segment comprising a plurality of contiguous pixels arrayed substantially parallel to said filtering axis and intersected by a boundary of said block; and

    (d) selectively filtering said pixels of said filtering segment.

10. The method of claim 9 wherein the step of establishing a filtering axis relatively parallel to an image edge in said block comprises the steps of:

    (a) designating a plurality of candidate axes;

    (b) identifying a first pixel and a second pixel located on a projection parallel to a candidate axis, said first pixel located in a vicinity of a first boundary of said block and said second pixel located in a vicinity of a second boundary;

    (c) determining a difference between said first pixel and said second pixel;

    (d) repeating steps (b) and (c) for said plurality of candidate axes;

    (e) identifying as said filtering axis said candidate axis corresponding to a function of a minimum difference between said first and said second pixels.

11. The method of claim 9 comprising the further step of designating said filtering segment subject to filtering if a pair of pixels of said filtering segment adjacent to said boundary satisfies a predetermined relationship to a threshold.

12. The method of claim 11 wherein the step of designating said filtering segment subject to filtering a pair of pixels of said filtering segment adjacent to a

boundary of said block satisfies a predetermined relationship to a threshold comprises the steps of:

    (a) comparing a difference between said pair of pixels to an upper boundary threshold; and

5   (b) comparing said difference between said pair of pixels to a lower boundary threshold.

13. The method of claim 12 wherein said lower boundary threshold is a function of a quantization parameter for said block.

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14. The method of claim 9 comprising the further steps of:

    (a) designating at least one pixel on each side of said boundary as a filtering range; and

    (b) filtering said pixels of said filtering range.

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15. The method of claim 14 wherein the step of designating at least one pixel on each side of said boundary as a filtering range comprises the steps of:

    (a) selecting a pixel of said filtering segment adjacent to said boundary for inclusion in said filtering range; and

20   (b) successively including in said filtering range a next contiguous pixel until a difference between a last pixel included in said filtering range and said next contiguous pixel exceeds a continuity threshold.

25 16. The method of claim 15 wherein said continuity threshold is a function of a quantization parameter for said block.

17. The method of claim 15 wherein said continuity threshold is a function of a difference between a first pixel located in a vicinity of a first boundary of said

30 block and a second pixel located in a vicinity of an opposing second boundary
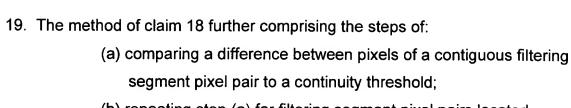
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of said block.

18. A method of post processing a decompressed image comprising the steps of:

(a) identifying a block of image pixels defined by a block boundary;

5 (b) comparing a quantization parameter applicable to said block to a threshold quantization parameter;

(c) selecting a pixel pair arrayed on each of a plurality of projections parallel to a plurality of candidate filtering axes, if said block quantization parameter exceeds said threshold quantization

10 parameter;

(d) summing the mean difference between pixels of said pixel pair for each of said plurality of projections for each of said candidate filtering axes;

(e) selecting said candidate filtering axis corresponding to a least of

15 said sum of said difference between pixels of said pixel pair as a filtering axis;

(f) identifying a filtering segment comprising a plurality of filtering segment pixels arrayed in a direction parallel to said filtering axis;

20 (g) identifying a filtering range comprising at least one said filtering segment pixel on each side of said block boundary; and

(h) filtering said filtering segment pixels of said filtering range to smooth said decompressed image.

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19. The method of claim 18 further comprising the steps of:

      (a) comparing a difference between pixels of a contiguous filtering segment pixel pair to a continuity threshold;

      (b) repeating step (a) for filtering segment pixel pairs located successively more remote from said block boundary until said difference exceeds said continuity threshold; and

      (c) limiting said filtering range to an array of successively more remote filtering segment pixels on each side of said block boundary; each pixel being a member of a filtering segment pixel pair characterized by said difference being less said continuity threshold.

20. A method of post-processing interlaced video comprising the steps of:

      (a) establishing a filtering axis aligned relatively parallel to an edge in a block of pixels of a first interlaced field;

      (b) selectively filtering a plurality of pixels of said block of said first interlaced field arrayed substantially parallel to said filtering axis;

      (c) establishing a filtering axis aligned relatively parallel to an edge in a block of pixels of a second interlaced field; and

      (d) selectively filtering a plurality of pixels of said block of said second field arrayed substantially parallel to said filtering axis.

21. The method of claim 20 wherein the step of establishing said filtering axis comprises the steps of:

      (a) identifying a first pixel and a second pixel located on a projection parallel to a candidate axis; said first pixel located in a vicinity of a first boundary of a block and said second pixel in a vicinity of a second boundary of said block;

      (b) comparing said first and said second pixel;

      (c) repeating steps (a) and (b) for a plurality of said candidate

axes; and

(d) designating as said filtering axis said candidate axis associated with a comparison of said first and said second pixel having a predefined relationship to corresponding comparisons for other said candidate axes.

22. The method of claim 21 wherein said relationship between comparisons is a minimum of a difference between said first and said second pixel.

23. The method of claim 20 wherein the step of selectively filtering a plurality of pixels arrayed substantially parallel to said filtering axis comprises the steps of:

(a) designating a segment of contiguous pixels to be subject to filtering if a comparison of a pair of pixels of said segment immediately adjacent to a boundary of said block satisfies a predetermined relationship; and

(b) selectively filtering said pixels of said segment.

24. The method of claim 20 wherein said predetermined relationship comparing said pair of pixels adjacent to said boundary comprises a upper boundary threshold for a difference between said pair of pixels.

25. The method of claim 20 wherein said predetermined relationship for comparing said pair of pixels adjacent to said boundary comprises a lower threshold for a difference between said pair of pixels.

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26. The method of claim 25 wherein said lower threshold comprises a function of a quantization parameter applicable to said block.

27. The method of claim 20 wherein the step of selectively filtering a plurality of
5 pixels arrayed substantially parallel to said filtering axis comprises the steps of:

   (a) designating a segment of contiguous pixels to be subject to filtering if a comparison of a pair of pixels of said segment immediately adjacent to a boundary of said block satisfies a
10 predetermined relationship;

   (b) identifying at least one pixel on each side of said boundary as a filtering range by successively comparing contiguous pairs of pixels further removed from said boundary to a continuity threshold; and

15 (c) filtering said pixels of said filtering range.

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